

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
29 September 2005 (29.09.2005)

PCT

(10) International Publication Number
WO 2005/090373 A1

(51) International Patent Classification⁷: C07F 17/00,
C08F 4/642, 4/52, 110/02

(21) International Application Number:
PCT/EP2005/002741

(22) International Filing Date: 15 March 2005 (15.03.2005)

(25) Filing Language: German

(26) Publication Language: German

(30) Priority Data:
04006357.0 17 March 2004 (17.03.2004) EP
10 2004 055 922.8 19 November 2004 (19.11.2004) DE

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(81) Designated states (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,
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MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO,
NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, YU, ZA, ZM, ZW.

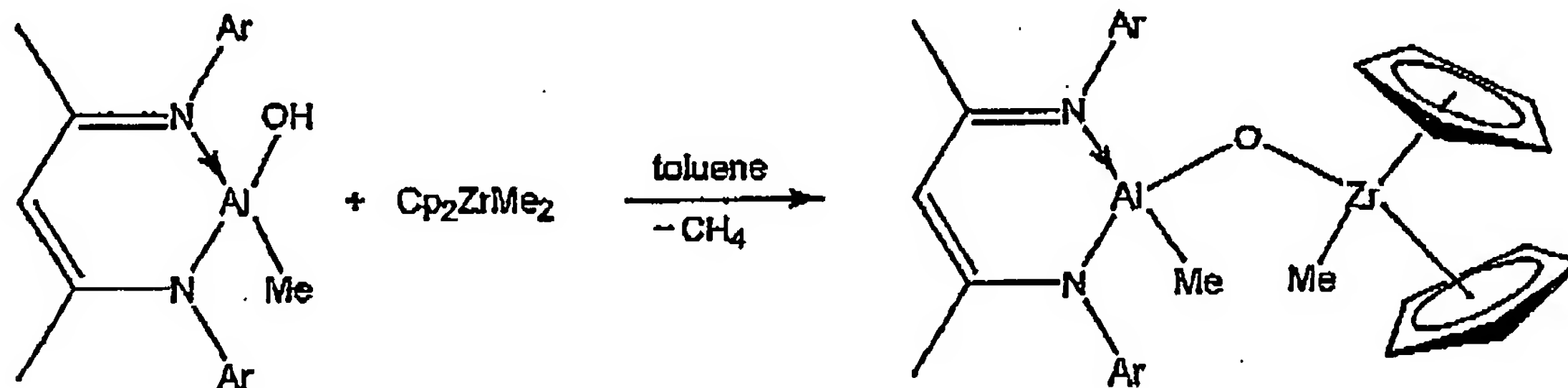
(84) Designated states (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,

[continued on next page]

As printed

(54) Title: OXYGEN-BRIDGED BIMETALLIC COMPLEX, THE PRODUCTION THEREOF AND ITS UTILIZATION FOR
POLYMERIZATION CATALYSIS

(54) Bezeichnung: SAUERSTOFFVERBRÜCKTER BIMETALLISCHER KOMPLEX, DESSEN HERSTELLUNG UND VER-
WENDUNG FÜR DIE POLYMERISATIONS-KATALYSE



(57) Abstract: The binuclear, oxygen-bridged, hetero-bimetallic complexes of general formula $[(LM^1R^1)(Cp_2M^2R^2)]^{n+}-O$ are suitable as polymerization catalysts for olefin polymerization. ($M^1 = Al, Ge, Zr$ or Ti ; $M^2 = Zr, Ti$ or Hf ; Cp = cyclopentadienyl; R^1, R^2 = methyl, ethyl, i-propyl, t-butyl, halogen, phenyl, alkylphenyl, $SiMe_3$; L = bidentate, doubly nitrogen-coordinated organochemical ligand, which together with metal M^1 form a 5- or six membered ring). These complexes have very good catalytic activity, good useful life and require less cocatalysts.

(57) Zusammenfassung: Die zweikernigen, sauerstoffverbrückten, hetero-bimetallicischen Komplexe der allgemeinen Formel: $[(LM^1R^1)(Cp_2M^2R^2)]^{n+}-O$ eignen sich als Polymerisations-Katalysatoren für die Olefinpolymerisation. ($M^1 = Al, Ge, Zr$ oder Ti ; $M^2 = Zr, Ti$ oder Hf ; Cp = Cyclopentadienyl; R^1, R^2 = Methyl, Ethyl, i-Propyl, t-Butyl, Halogen, Phenyl, Alkylphenyl, $SiMe_3$; L = bidentaler, zweifach Stickstoff-koordinierter organochemischer Ligand, der zusammen mit dem Metall M^1 einen 5- oder 6-Ring bildet). Sie zeigen sehr gute katalytische Aktivitäten, gute Standzeiten und erfordern wenig Kokatalysator.

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UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

- of inventorship (Rule 4.17(iv)) for the following designation US

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ,

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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